## IN THE CLAIMS

- 1. (Currently amended) A processing system comprising: - a calculation unit (13), compriseing at least one port a storage device and a system for switching between the storage device and the calculation unit, said processing system being characterized in that: - a storage device. the storage device comprises several banks of registers (21, 22), wherein a bank of registers stores words of P/N bits, a data item to be communicated being comprised in one or more words, P and N being integral numbers, N being greater than or equal to 2 and P being a multiple of N; - a system for switching between the storage device and the calculation unit the switching system comprises at least one switching device (24) associated with each bank of registers and also comprising a common switching device (27) by means of which the port of the calculation unit can communicate with several registers; - the calculation unit is able to communicate with at least two banks of registers by means of the associated switching devices; - wherein, at a first time, the calculation unit communicates with i registers for reading or writing a data item of iP/N bits, i being a first integer between 1 and N, and at a second different time, the calculation unit communicates with i registers for reading or writing a data item of iP/N bits, i being a second different integer between 1 and N.
- 2. (Canceled)
- 3. (Canceled)
- 4. (Original) A processing system as claimed in claim 1, characterized in that the calculation unit comprises at least one port, said port being able to communicate with a single bank of registers.

- 5. (Original) A processing system as claimed in claim 4, characterized in that each bank of registers stores a data type and the port of the calculation unit is associated with a data type.
- 6. (Previously presented) An image reproduction processor comprising a processing system as claimed in claim 1.
- 7. (Original) A set-top box comprising at least one image reproduction processor as claimed in claim 6.
- 8. (Original) A device comprising at least one screen intended to display images and an image reproduction processor as claimed in claim 6.
- 9. (Original) A communication network comprising at least one transmitter able to send signals representing at least one image, a transmission network, a receiver able to receive said signals and an image reproduction processor as claimed in claim 6.